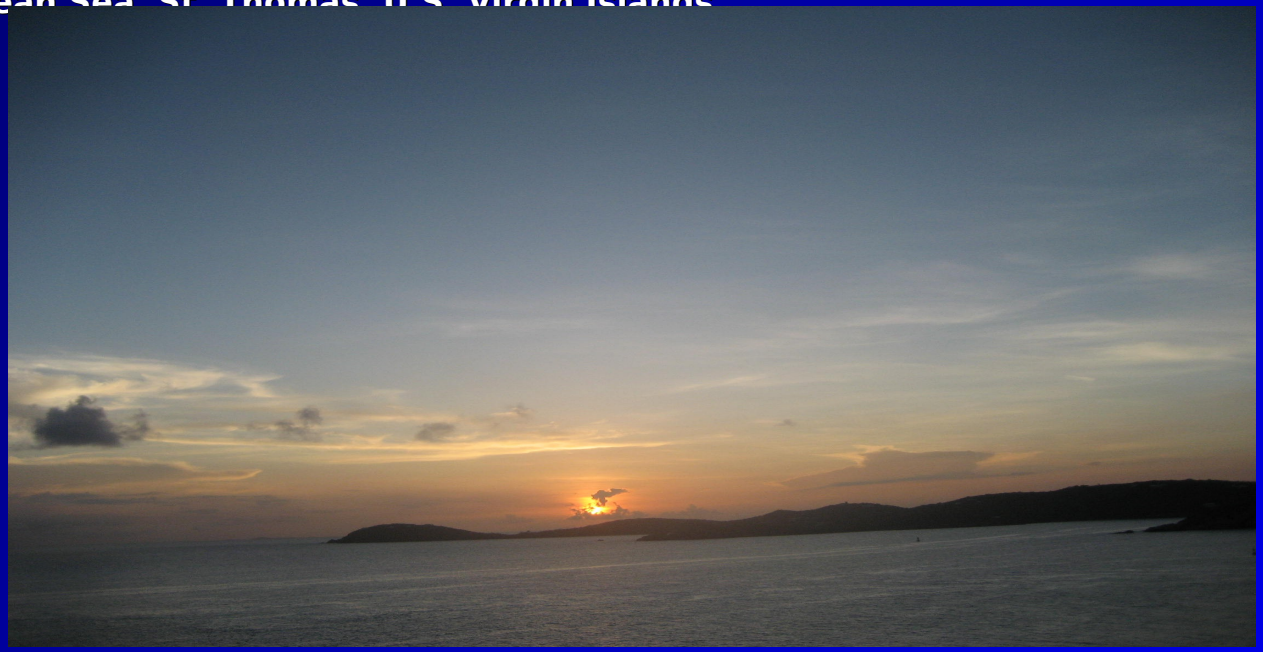
# U.S. ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION FORM INSTRUCTIONAL GUIDEBOOK

*Mobile District*

**This document contains instructions to aid field staff in completing the Approved Jurisdictional Determination Form ("JD form"). This document is intended to be used as the U.S. Army Corps of Engineers Regulatory National Standard Operating Procedures for conducting an approved jurisdictional determination (JD) and documenting practices to support an approved JD until this document is further revised and reissued.**

**Caribbean Sea, St. Thomas, U.S. Virgin Islands**



**This document was prepared by the Corps and the EPA.**

# JD Form Guidebook

Mobile District

**Please note:**

- The JD Guidebook is not a regulation, does not supercede any existing regulations, nor does it pose any legally binding requirements on the Corps, EPA or the regulated public. Also, it is possible that it may not apply to a particular situation depending on the circumstances. Any final decisions regarding a particular water will be based not only on the Guidance but also any applicable statutes, regulations, and or case law.

# Post-Rapanos Jurisdiction

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- In the Rapanos Guidance, aquatic resources and other landscape features fall into 3 categories:

1) Those that are clearly jurisdictional under the CWA

2) Those that are jurisdictional only if a significant nexus to a TNW exists and can be documented

3) Those landscape features that are clearly not jurisdictional

# *Post-Rapanos Jurisdiction*



As laid out in the Guidebook, the following waters are clearly jurisdictional under the CWA:

- TNWs and wetlands <u>adjacent</u> to TNWs
- Relatively Permanent Waters (RPWs) that are tributaries of TNWs
  - Perennial streams
  - Intermittent streams that have continuous flow at least seasonally
- Wetlands <u>directly abutting</u> RPWs

# Post-Rapanos Jurisdiction Significant Nexus Req'd

Mobile District

The following waters are jurisdictional only if they have a significant nexus to a TNW:

- Non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally (non-RPWs)
- Wetlands adjacent to non-RPW tributaries
- Wetlands adjacent to but that do not directly abut an RPW

# CWA Jurisdiction

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These geographic features *generally are not* jurisdictional waters:

- **swales**, **erosional features** (e.g. gullies) and small washes characterized by low volume, infrequent, and short duration flow (no OHWM)
- **ditches** (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

# CWA Jurisdiction

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**Caution**: Certain man-made features (e.g., canals, ditches, pipes) are sometimes considered tributaries and *may be* jurisdictional where the features:

- replace or relocate a water of the U.S., or
- connect a water of the U.S. to another water of the U.S., or
- provide relatively permanent flow to a water of the U.S. (is an RPW and has OHWM)

# *Impoundments*

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- An impoundment of waters of the U.S. does not affect the water's jurisdictional status except in the case of the impoundment being permitted for a storm water treatment pond. Once constructed the storm water pond is not jurisdictional under Section 404 unless there is a change of use, then a 404 permit is required for the new activity.

- Contrary to popular belief, a storm water treatment pond does not sever all upstream waters from our regulatory authority.

# Isolated Waters

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**May be jurisdictional if:**

- Are or could be used for interstate travelers for recreation or commercial purposes
- Fish or shell fish are or could be taken and sold in interstate or foreign commerce
- Are or could be used for industrial purposes
- Interstate waters (cross state lines)
- Will not be jurisdictional I based solely on MBR (SWANCC)

# Traditional Navigable Waters (TNWs)

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All TNWs are clearly jurisdictional under the CWA .

# Wetlands Adjacent to TNWs

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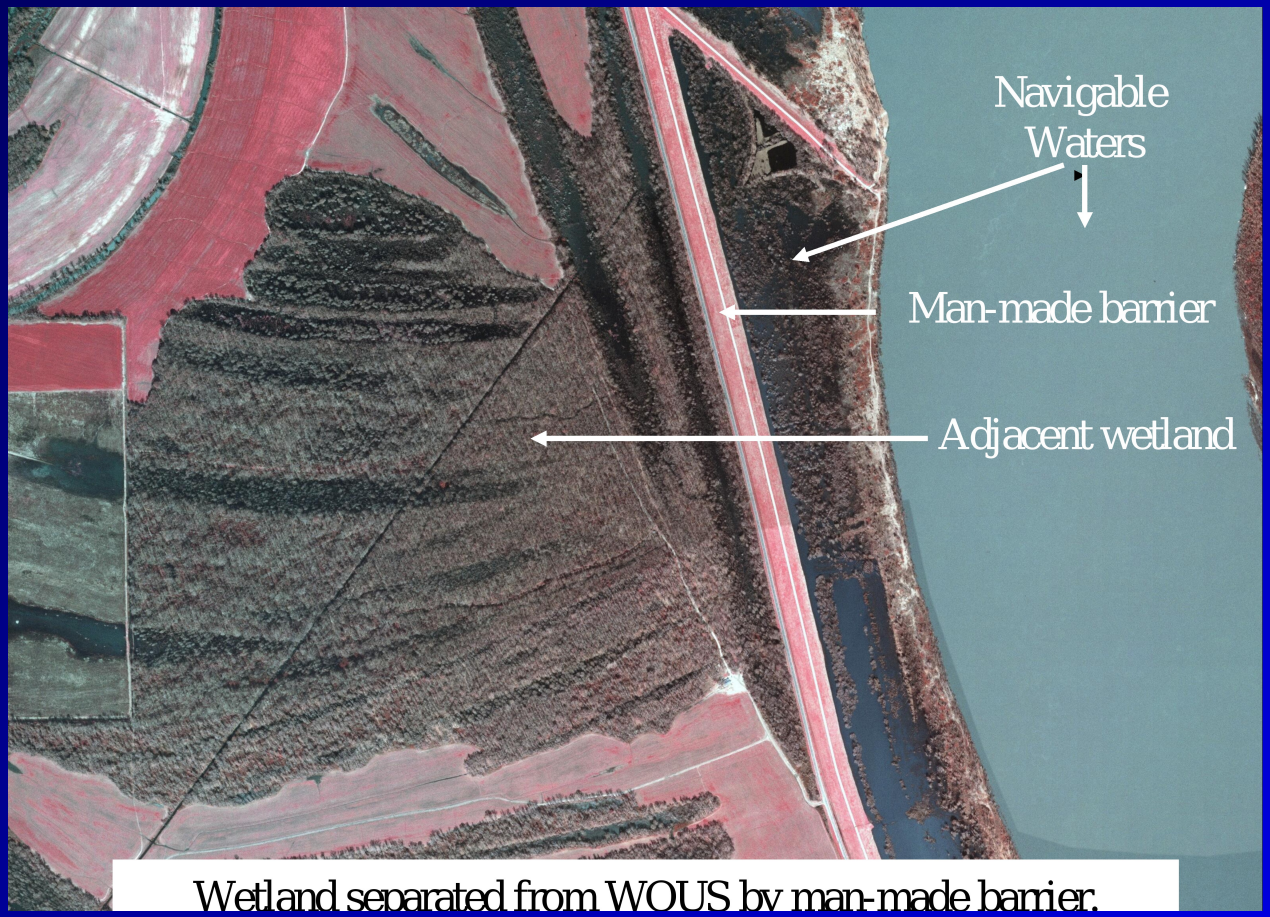



Wetland separated from WOUS by man-made barrier.

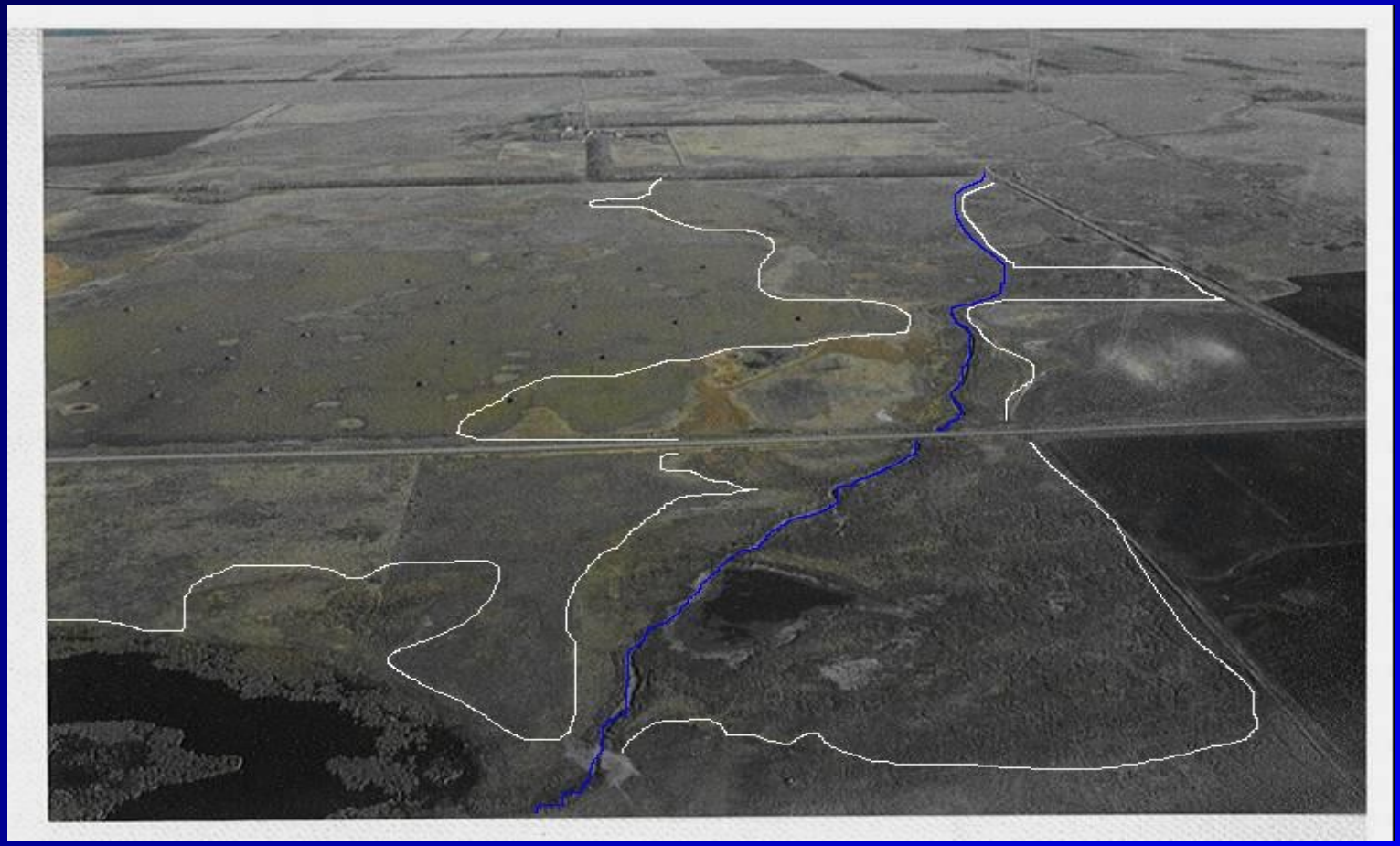
Wetlands adjacent to TNWs are clearly jurisdictional under the CWA – (no SN req'd).

# RPWs: Perennial & Seasonal

RPWs (at least seasonal flow) are jurisdictional under the CWA – (no SN determination req'd).

# Wetlands Directly Abutting RPWs





Wetlands **directly abutting** RPWs that flow directly or indirectly into TNWs are jurisdictional under the CWA – (no SN req'd).

# *Wetlands Not-Directly Abutting RPWs*

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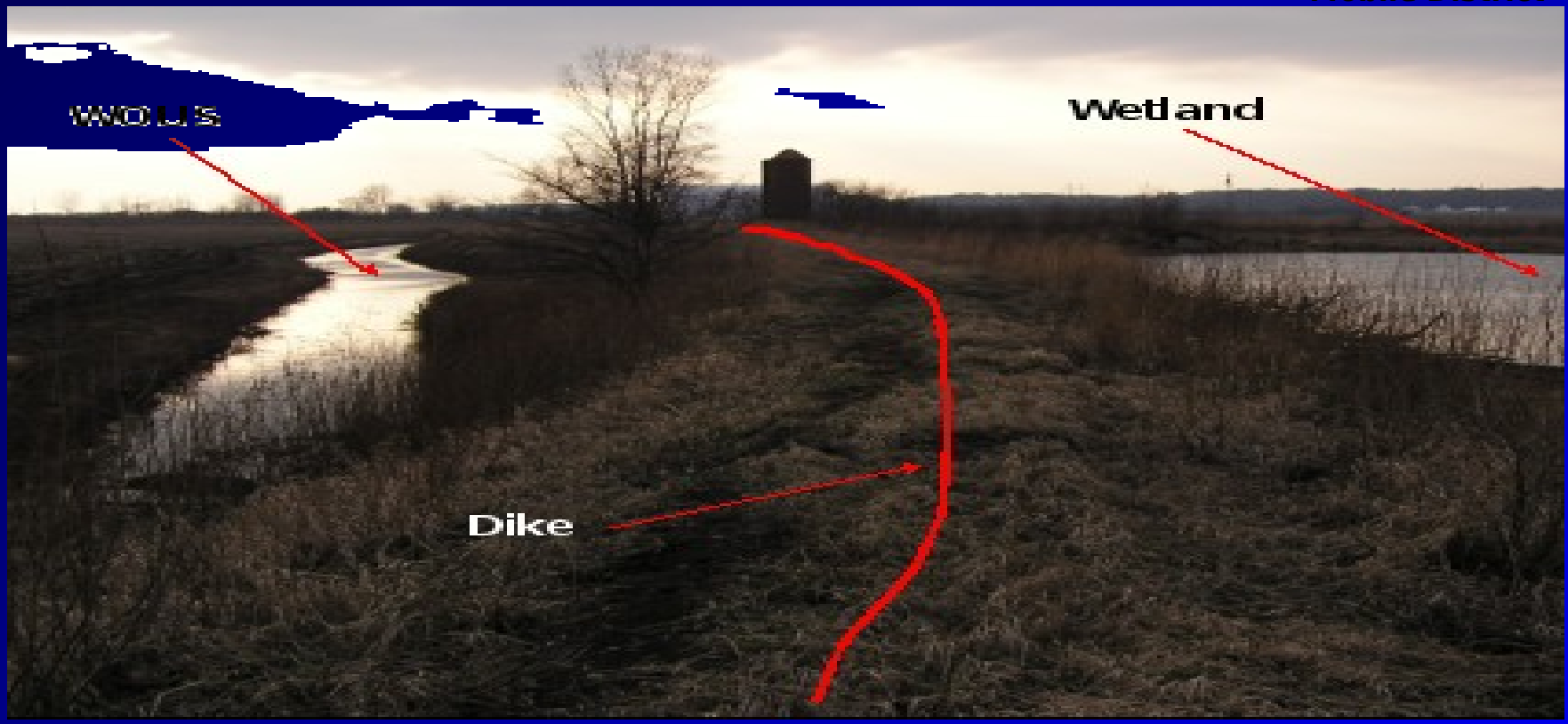


**Wetlands** adjacent to but <u>not directly abutting</u> RPWs that flow directly or indirectly into TNWs are jurisdictional if there is a "significant nexus" with a TNW. <u>Significant nexus evaluation is required</u> before it can be determined if tributary is jurisdictional under the CWA.

# Non-RPWs

Non-RPWs are jurisdictional  where there is a “significant nexus” with a TNW.  **A** significant nexus evaluation is needed to determine if the non-RPW tributary, in combination with its adjacent wetlands (if any), is jurisdictional under the CWA.

# Wetlands Adjacent to Non-RPWs

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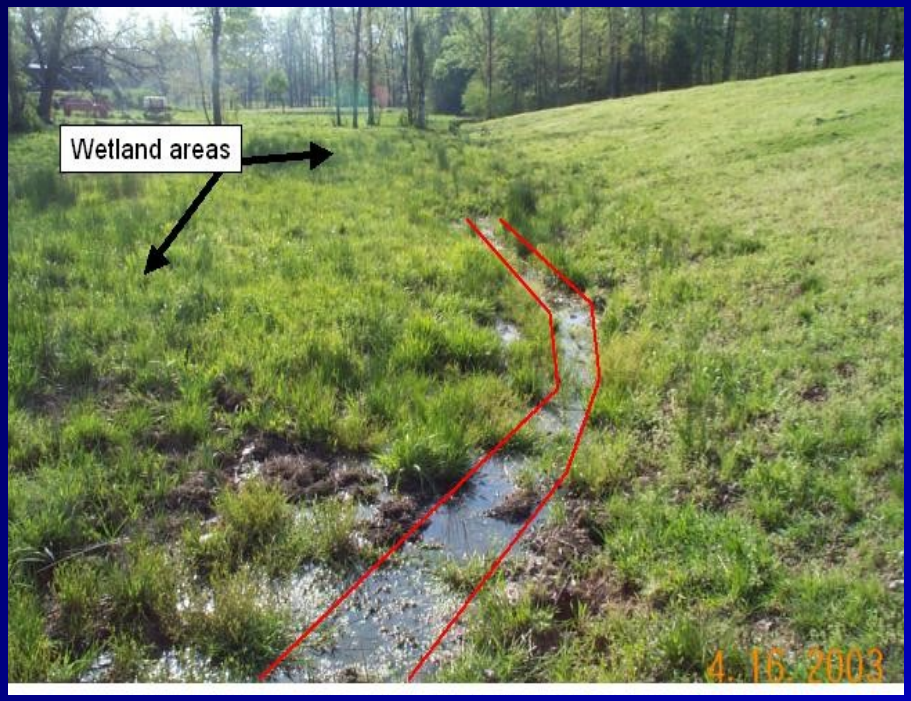


**Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs are jurisdictional where there is a "significant nexus" with a TNW. A significant nexus evaluation is needed to determine if tributary is jurisdictional under the CWA.**

# Ditches, Swales, & Erosional Features

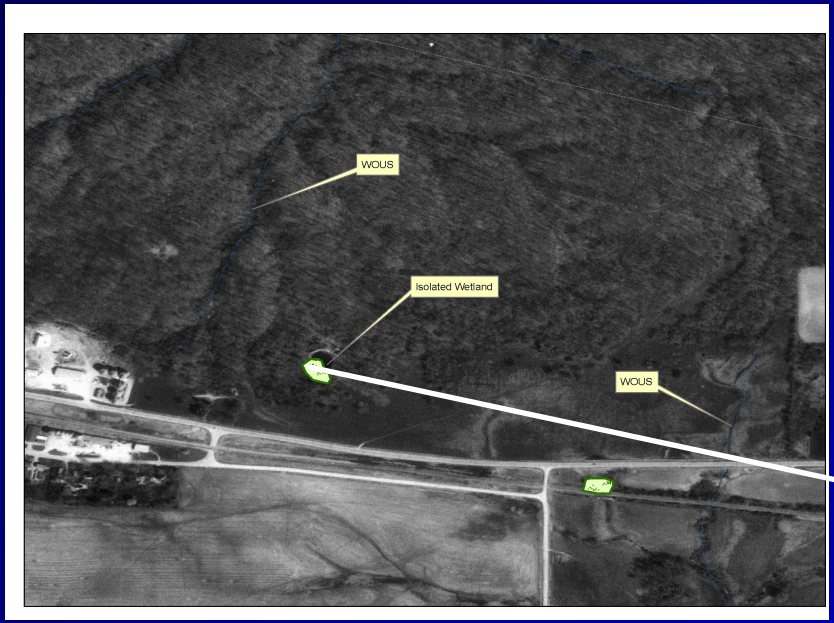
# Swales – Non-Jurisdictional (no OHWM)

# Erosional Features

**Even large erosional features such as gullies with high flow volumes are generally not regulated as WOUS because they are not tributaries and they do not have a significant nexus to TNWs.**

# Isolated Waters & Wetlands





A case-by-case determination is needed for isolated waters (including isolated wetlands). Cannot claim jurisdiction solely on Migratory Bird Rule (SWANCC). Usually non-jurisdictional because no link to interstate commerce can be established. Coordination with Corps HQ required.

# Man-made RPW feature

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- **Man-made channels are jurisdictional if they reroute or connect to a WOUS and have enough volume and frequency of flow to be considered as a tributary.**

# *Significant Nexus*



A "significant nexus" exists where a water, either alone or in combination with other similarly situated waters, significantly affects (helps to maintain) the chemical, physical, and biological integrity of a downstream traditional navigable water.

# Significant Nexus



Under the Rapanos Guidance, a significant nexus analysis applies to a given stream reach. It includes an assessment of the flow characteristics and functions of the tributary itself, in combination with the functions performed by any wetlands adjacent to the tributary, to determine if they have more than an insubstantial or speculative effect on the chemical, physical and biological integrity of TNWs.

# Significant Nexus



- **Regarding distances, the Rapanos Guidance specifically states:**

*"It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g., between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact that an adjacent wetland lies within or outside of a floodplain is not solely determinative of a significant nexus".*

# SN Determination

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1. If there are no adjacent wetlands, the significant nexus analysis must focus analysis on the tributary

2. The flow characteristics should be evaluated at the point where water is contributed to a higher order stream and consideration given to the effects the flow has on downstream TNW

3. If there are adjacent wetlands, evaluate the relationship between the tributary and its wetlands and consider how the whole system effects the hydrologic, & ecological integrity of downstream TNW

# SN Determination



**Consider *hydrologic* factors such as:**

- volume, duration, and frequency of flow, including consideration of physical characteristics (channel dimensions, OHWM, etc) of the tributary
- proximity to the traditional navigable water
- size of the tributary watershed
- average annual rainfall

# SN Determination

Mobile District

**Consider *ecologic* factors such as:**

- the ability of the tributary and its adjacent wetlands (if any) to carry pollutants and flood waters to traditional navigable waters
- the ability of the tributary and its adjacent wetlands (if any) to provide aquatic habitat and lifecycle support for species that are present in a downstream TNW
- the ability for adjacent wetlands to trap and filter pollutants or store flood waters before they enter a TNW
- the ability for adjacent wetlands to maintain water quality in a downstream TNW

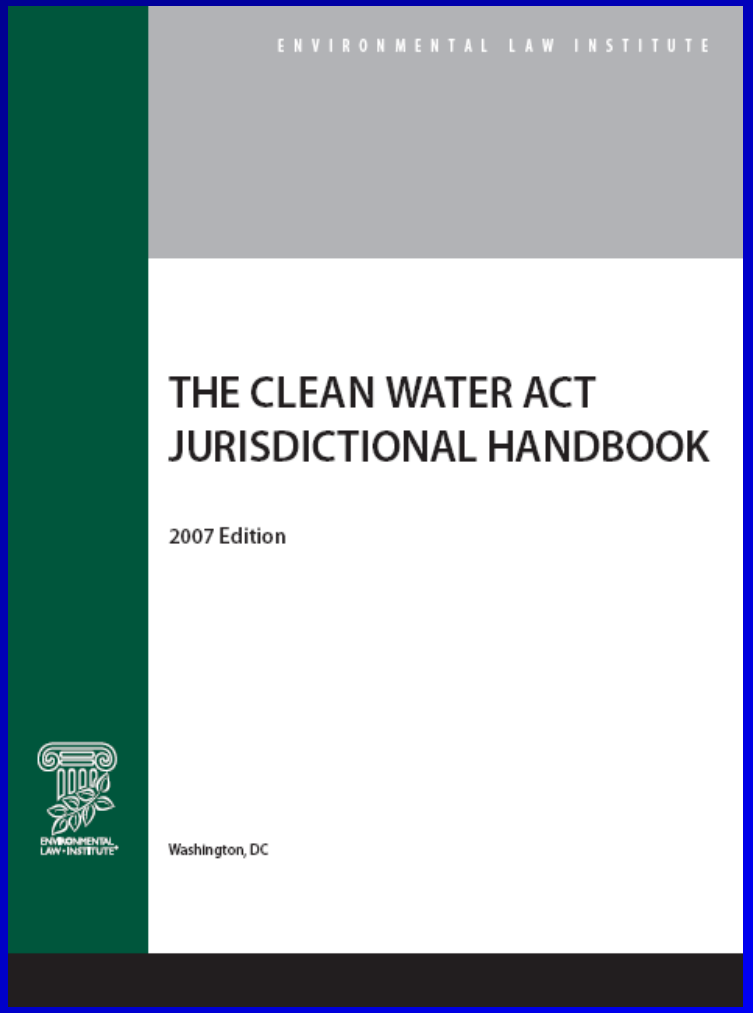
# Significant Nexus Analysis



- **Excellent reference containing technical discussion of SN analysis for different water resource types:**

**Environmental Law Institute**

**http://www.eli.org**



# Other Reference Sources



**Other sources of information regarding Rapanos Guidance and SN Determinations are available at:**

- **Corps HQ Regulatory Website**

  **http://www.usace.army.mil/cw/cecwo/reg**

- **EPA HQ Website (has very good scientific references for use in SN evaluations)**

  **http://www.epa.gov/owow/wetlands/guidance/CWAwaters.html**

# *Post-Rapanos JD Form*

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Corps of
Engineers

# JD Form

Mobile District

## Use of the JD Form

- Wetland delineations should be performed as usual using the Field Data Sheets in the Corps ’87 Manual. In addition, the JD Form will have to be used to document the *connectivity and nexus to TNWs* to determine whether or not a water is jurisdictional under the CWA.

# New JD Form



- **Need to understand the following terms to use the form:**
  - **Tributary**
  - **OHWM**
  - **Stream Order**
  - **Relative Reach**
  - **Similarly situated waters**

# Tributary



- A tributary, as defined by the guidance, is a natural, man-altered, or man-made feature that carries confined flow directly or indirectly into a TNW. May or may not be jurisdictional.

- **Note**: Concrete-lined channels, ditches, pipes, etc. can sometimes be considered tributaries.

# *Ordinary High Water Mark (OHWM)*



- The term "**ordinary high-water mark**" means a "line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." (33 CFR §328.3(e)).

# OHWM



- The Corps views tributaries as “waters of the U.S” if they carry a perceptible OHWM.

- In the absence of adjacent wetlands, the OHWM is used to determine the lateral limits of 404 jurisdiction (pre-Rapanos).

# OHWM



- **Some visual indicators of OHWM include:**
  - **Bed and banks**
  - **Natural line impressed on bank**
  - **Shelving**
  - **Changes in character of soil**
  - **Absence of terrestrial vegetation**
  - **Prominent water staining on structures**
  - **Multiple observed flow events**
  - **Sediment deposits (must be careful that not caused by storm events)**

# OHWM



- **Other reliable methods that can be used for determining OHWM:**
  - **Stream gage data**
  - **Spillway elevations on impounded waters**
  - **Historical records of water flow**

# OHWM

**Hillside seep forming non-RPW tributary with OHWM. Upper limit of 404 jurisdiction if SN determined.**

# OWHM

***Non-RPW (Ephemeral) stream – Jurisdictional if SN***

# OHWM

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**Ditch is constructed in uplands. <u>May be jurisdictional</u> because it conveys water from a wetland to a stream and has OHWM. SN determination required.**

# OHWM

**OHWM on lake shoreline at low water condition, apparent by lack of terrestrial vegetation, water staining on pilings.**

# OHWM

- Ordinary high water mark is apparent by scour and lack of vegetation

# OHWM

***Ephemeral Stream through Uplands - Jurisdictional if SN***

# Continuous OHWM

# OHWM - Impoundments

# Stream Order

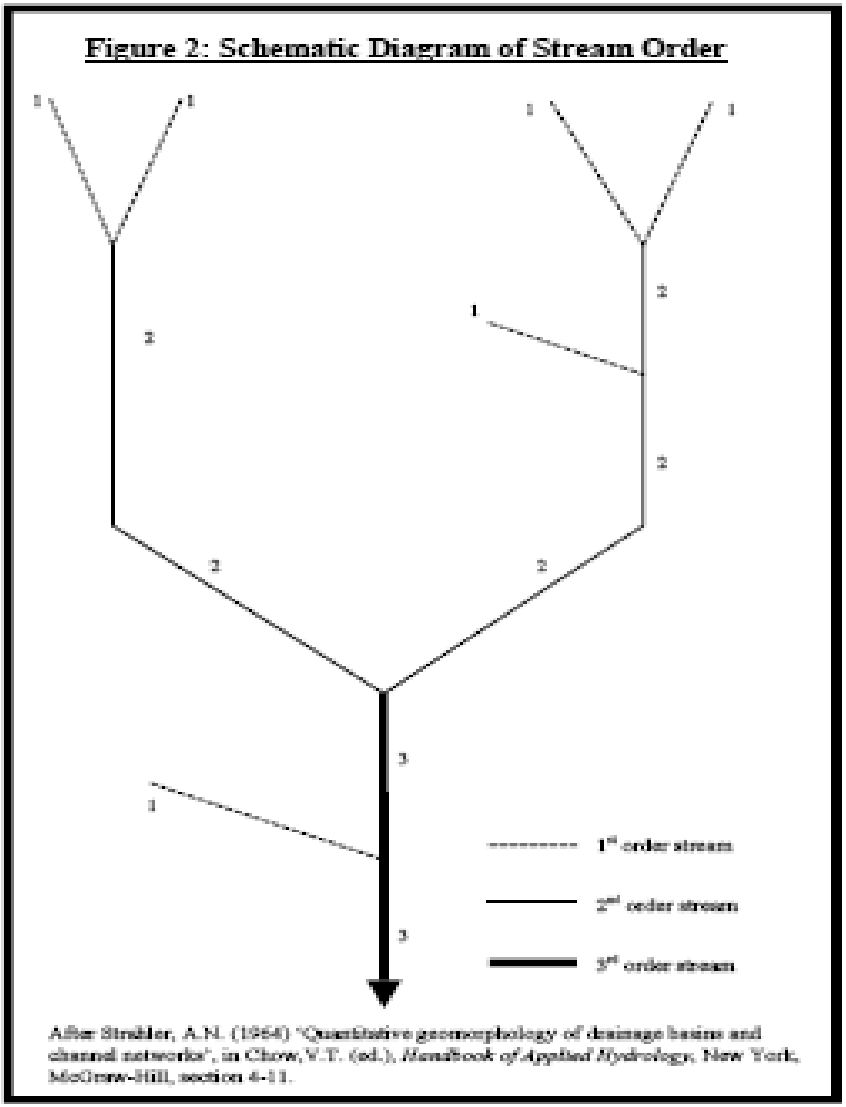


"Stream order" is a simple method of classifying stream segments based on the number of tributaries upstream. A stream with no tributaries (headwater stream) is considered a first order stream. A segment downstream of the confluence of two 1st order streams is a 2nd order stream. Thus, a nth order stream is always located downstream of the confluence of two (n-1)th order streams. (Strahler 1952)

# Stream Order



**Figure 2: Schematic Diagram of Stream Order**




After Strahler, A.N. (1964) "Quantitative geomorphology of drainage basins and channel networks", in Chow, V.T. (ed.), *Handbook of Applied Hydrology*, New York, McGraw-Hill, section 4-11.

# Relevant Reach



- "Relevant reach" relates to the portion of a tributary that must be considered in the significant nexus determination. For the purposes of the SN determination, the relevant reach is the entire reach of the stream that is of the same order (i.e., from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream).

# Relevant Reach (cont)



- On the JD Form, the significant nexus evaluation will combine, for analytical purposes, the relevant reach of the tributary and all of its adjacent wetlands, whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both.

- The flow characteristics of the particular tributary will be evaluated at the farthest downstream limit of the tributary (i.e., the point the tributary enters a higher order stream) whether it is within the project review area or not.

# Relevant Reach (cont)



- Even if you have several discrete wetlands located along one relevant stream reach, you only need to complete one JD form for the reach.

- If a single stream reach is crossed multiple times during a project, it is only necessary to complete one JD form for the entire reach.

# Relevant Reach

Project is on a tributary with non-RPWs and no adjacent wetlands. The “relevant reach” is the entire length of the tributary to its’ confluence with another stream.

# Relevant Reach

Project is on a non-RPWs that becomes an RPW. SN for the “non-relatively permanent” portion of the stream is determined by analyzing the functions of the entire stream of the same order and all adjacent wetlands. The lower RPW portion of the stream is jurisdictional by definition.

# Relevant Reach

Project site is adjacent to a non-RPW stream reach which becomes an RPW with adjacent wetlands. SN determination must analyze the functions of the entire stream reach of the same order and all adjacent wetlands. The lower RPW portion is jurisdictional by definition.

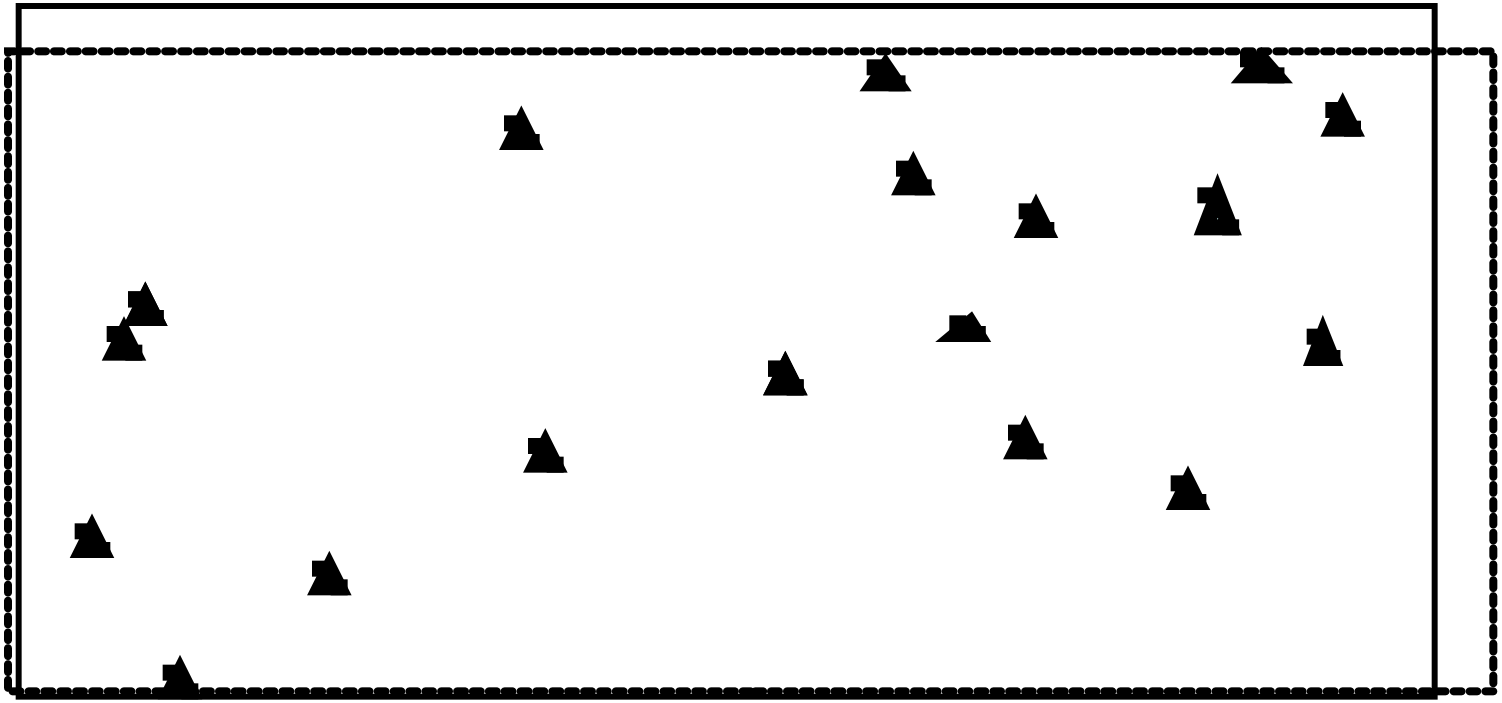
# Relevant Reach

Project involves a wetland adjacent to 2 non-RPW tributaries. The “relevant reach” includes the impacted wetland and any other wetlands adjacent to those 2 tributaries, and both tributary channels.

# Relevant Reach

Project involves wetlands adjacent to a non-RPW tributary. The “relevant reach” includes the entire stream segment of the same order (2) and its’ adjacent wetlands.

A large project  with numerous tributary reaches requires a separate JD Form to be completed for each relevant reach



# Similarly Situated



- Wetlands are considered "similarly situated" under the guidance if they are adjacent to the same relevant stream reach. All of these wetlands are considered, along with tributary, in the significant nexus determination.

- Wetlands that are similarly situated can usually be lumped together with one entry on the JD form in Section III.B.3.

# JD Form

Mobile District

- The new JD form has four Sections. Of these, Section III – CWA Analysis, is the real meat of the form. Section III is subdivided into six subparts (A-F). Subparts B and C comprise the most information/time-intensive part of Section III.

- **Subpart B** – Characteristics of Tributary and Its Adjacent Wetlands requires detailed ***factual*** information on the physical, chemical and biological characteristics of the tributary and all adjacent wetlands.

- **Subpart C** – Significant Nexus Determination requires an ***analysis*** of the flow characteristics and functions of the tributary and all adjacent wetlands to determine if they significantly affect the physical, chemical and biological integrity of a TNW.

# JD Form (continued)



- A JD form is required for ALL stream reaches and associated wetlands, even TNWs and wetlands adjacent to TNWs. Subparts B and C are NOT required to be completed for TNWs, wetlands adjacent to TNWs, RPWs, or wetlands that directly abut RPWs. However, you must still fill out other portions of the JD form for these jurisdictional features.

- Subparts B and C are required for ALL other waterbodies and wetlands.

# JD Form



- In filling out the JD Form, it is understood that not all data can be always be obtained on the ground. Make good use of other available sources such as maps, aerial photography, soil surveys, watershed studies, etc.

## Jurisdictional Water Categories[1]

| JD Form Section | | | TNW | | RPW-Perennial | | | RPW-Seasonal | | | Non-RPW | | Isolated Waters | Non-JD Waters |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Tributary | Adjacent Wetland | Tributary | Abutting Wetland | Adjacent Wetland | Tributary | Abutting Wetland | Adjacent Wetland | Tributary | Adjacent Wetland | | |
| I | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| II | A | | ✔ | ✔ | | | | | | | | | | |
| | B | 1 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | 2 | | | | | | | | | | | ✔ | ✔ |
| III | A | | ✔ | ✔ | | | | | | | | | | |
| | B | 1 | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | ✔ |
| | | 2 | | | | ✔ | ✔ | | ✔ | ✔ | | ✔ | | ✔ |
| | | 3 | | | | ✔ | ✔ | | ✔ | ✔ | | ✔ | | |
| | C | 1 | | | | | | | | | ✔ | | | |
| | | 2 | | | | | | | | | | ✔ | | |
| | | 3 | | | | | ✔ | | | ✔ | | | | |
| | D | 1 | ✔ | ✔ | | | | | | | | | | |
| | | 2 | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | | |
| | | 3 | | | | | | | | | ✔ | ✔ | | |
| | | 4 | | | | ✔ | | | ✔ | | | | | |
| | | 5 | | | | | ✔ | | | ✔ | | | | |
| | | 6 | | | | | | | | | | ✔ | | |
| | | 7 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | ✔ |
| | E | | | | | | | | | | | | ✔ | ✔ |
| | F | | | | | | | | | | | | ✔ | ✔ |
| IV | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Significant Nexus | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | |
| EPA | | | | | | | ✔ | | | ✔ | ✔ | ✔ | ✔ | ✔ |
| Corps HQ | | | | | | | | | | | | | ✔ | ✔ |

[1]TNW: Traditionally Navigable Water; RPW: Relatively Permanent Water (perennial-year round flows & seasonal-at least 3 months / year); Non-RPW: includes all ephemeral tributaries